What is claimed:

- 1. A method for the preparation of desflurane comprising: reacting isoflurane with 0.7-1.2 mol.% of antimony pentachloride and 1.3-2.2 molar equivalents of hydrogen fluoride.
- 2. The method of claim 1, wherein the reaction is conducted with 1.5-2.0 molar equivalents of hydrogen fluoride.
- 3. The method of claim 1, wherein the reaction is conducted at temperatures of 9-18 °C.
- 4. The method of claim 1, wherein the reaction is conducted for about 6 to 7 hours after the addition of hydrogen fluoride is completed.
- 5. The method of claim 1, wherein hydrogen fluoride is added at the rate of 0.25 to 1.5 molar equivalents per hour to a mixture of isoflurane and antimony pentachloride.